REMARKS

Claim status

Claims 1-26 were pending in the case at the time of the current Office Action. Claims 1-26 are currently amended herein mainly to take care of minor informalities and to add clarity, not for issues related to patentability. New claim 27 has been added by this amendment and is believed to be fully supported by the specification of the application. Claims 1-27 are currently pending in the application.

Section 102 rejections

In the current Office action, claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Register et al., U.S. Patent No. 5,606,594.

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

Independent claim 1 recites a handheld device comprising:

a handheld unit including a processor and a display communicating with said processor, and having a voice-driven interface;

a handset including voice input and voice output, and a wireless communication system;

a mechanism for docking said handset with said handheld unit forming a docked unit, said docked unit dimensioned to be held in one hand while being used for voice input and voice output; and

wherein voice-representative signals between said voice-driven interface of said handheld unit and said handset are communicated wirelessly.

It is respectfully submitted that Register et al. (U.S. Pat. No. 5,606,594), hereinafter Register, does not teach or suggest the invention of independent claim 1. Instead, Register describes a telephone accessory and method of telecommunicating for a personal digital accessory (PDA) where the PDA (100, 300) couples to the telephone (communication) accessory (200, 310). Referring to Figs. 1A, 2A, and 3 of Register, when the PDA (100, 300) is coupled to the communication accessory (200, 310), the processing circuitry 301 (see Fig. 3) and other circuitry within the PDA (100, 300) are coupled via a serial, parallel, or proprietary link 317 to

communication circuitry 311 within the communication accessory (200, 310). The communication circuitry 311 is adapted to receive control signals from the processing circuitry 301 (not voice representative signals). The communication circuitry 311 is coupled to microphone circuitry 312 and speaker circuitry 314 within the communication accessory (200, 310). The microphone circuitry 312 produces electrical signals for the communications circuitry 311 that are a function of a user's spoken voice. The speaker circuitry 314 produces sounds that are a function of output from the communication circuitry 311. To function in a telephone mode, the communications circuitry 311 simply modulates an internally-generated carrier wave with the signal received from the microphone circuitry 312, delivering the modulated carrier wave to antenna circuitry 316 of which the antenna 234 of Fig. 2B is a part. The antenna circuitry 316 produces a radio wave along a wireless link 321 to a remote transceiver 320 to allow wireless communications therewith. Transmissions from the remote transceiver 320 are received in the antenna circuitry 316, demodulated with the aid of the internally-generated carrier wave in the communications circuitry 311 and sent to the speaker circuitry 314. (column 7, lines 64-67 and column 8, lines 1-22).

From the above description of Register, and referring to Fig. 3 of Register, it is clear that any voice-representative signals are confined to the communication accessory (200, 310) and do not pass to the PDA (100, 300). The Examiner appears to be correlating the PDA (100, 300) of Register to the handheld unit of claim 1, and the communication accessory (200, 310) of Register to the handset of claim 1. Assuming such a correlation, claim 1 clearly states that voice-representative signals are carried between the handheld unit and the handset. However, voice-representative signals are not carried between the PDA (100, 300) of Register and the communication accessory (200, 310) of Register.

For example, referring to Fig. 7 of the present application, in a docked mode, voice-representative signals (e.g., originating as voice-modulated RF signals) may be received by the handheld unit 20 via the antenna 22. The voice-representative signals are passed through various stages of the handheld unit 20 to the handset 30. For example, the voice-representative signals received by the antenna 22 are passed to the wireless communication circuit 21, to the communication interface 17, to the central processor 11, to the audio interface 29, and then passed to the handset 30 across the connectors 23 and 36, passed to the OR gate 33, and finally

to the speaker 42. All along the way, the voice-representative signals are being processed and converted, but are still voice-representative signals. Also, in the docked mode, voice-representative signals may originate from a user speaking audio speech into the handset 30 via the microphone 43. The voice-representative signals are passed to the handset audio interface 82, and then passed to handheld unit 20 across the connectors 36 and 23, to the audio interface 29, to the central processor 11, to the communication interface 17, to the wireless communication circuit 21, and finally to the antenna 22 where the voice-representative signals may propagate from the antenna 22 as voice-modulated RF signals. Again, along the way, the voice-representative signals are being processed and converted, but are still voice-representative signals.

Similarly, in an undocked (i.e., wireless) mode, voice-representative signals may be received by the handheld unit 20 via the antenna 22, passed to the wireless communication circuit 21, passed to the communication interface 17, to the central processor 11, to the short-range transceiver 53, and then passed to the handset 30 from the short-range transceiver 53 to the short-range transceiver 31, to the handset controller 34, to the handset audio interface 82, to the OR gate 33, and finally to the speaker 42. Also, in the undocked mode, voice-representative signals may originate in the handset 30 via the microphone 43, be passed to the handset audio interface 82, to the handset controller 34, to the short-range transceiver 31, and then over to the handheld unit 20 from the short-range transceiver 31 to the short-range transceiver 53, and then passed to the central processor 11, to the communication interface 17, to the wireless communication circuit 21, and finally to the antenna 22.

Therefore, voice-representative signals are clearly passed between the handheld unit and the handset as claimed in claim 1. However, Register does not describe passing any kind of voice-representative signals between the PDA (100, 300) and the communication accessory (200, 310). Instead, Register describes control signals (column 8, line 3) and logic signals (column 8, line 27) being passed between the PDA (100, 300) and the communication accessory (200, 310). These control signals and logic signals may be used in the invention of Register to manage voice communications, but they are not voice-representative signals themselves. Any voice-representative signals of the invention of Register are confined to the communication accessory (200, 310). Register does not teach or suggest carrying voice-representative signals between a

handheld unit and a handset as does claim 1. Therefore, Register does not teach or suggest the invention of independent claim 1.

Further, Register does not show wireless communication between the handheld unit and the handset as in the present invention. Register describes only the ability to dock the PDA with the phone accessory by physical connection. This approach is reasonable for a device such as described by Register for adding a telephone accessory to a PDA, but would be greatly limiting in the present invention. The ability according to the present invention to allow the small handset to be removed, and yet be in communication with the handheld device by wireless communication provides significant abilities not contemplated nor made obvious by Register or any other prior art known to the applicant.

Therefore, in view of at least the foregoing, it is respectfully submitted that independent claim 1 is not anticipated by Register, and it is respectfully submitted that independent claim 1 defines allowable subject matter. Also, since claim 2 depends directly from claim 1, it is respectfully submitted that claim 2 defines allowable subject matter as well. Applicants respectfully request that the rejections under 35 U.S.C. 102(b) be removed.

Section 103 rejections

In the current Office action, claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register, as applied to claim 1 above, in view of Lai, U.S. Patent No. 6,269,259.

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

As described previously, Register does not teach or suggest the invention of independent claim 1 and it was submitted that claim 1 defines allowable subject matter. Therefore, the use of an ear hook for phones as described by Lai (U.S. Patent No. 6,269,259), hereinafter Lai, in combination with Register does not teach or suggest the invention of claims 3 and 4 which are dependent, either directly or indirectly, on claim 1. Since claims 3-4 are dependent, either directly or indirectly, from claim 1, it is respectfully submitted that claims 3-4 define allowable

subject matter as well. Applicants respectfully request that the rejection of claims 3-4 under 35 U.S.C. 103(a) be removed.

In the current Office action, claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register, as applied to claim 1 above, in view of Umezawa et al., U.S. Patent No. 5,491,507.

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

As described previously, Register does not teach or suggest the invention of independent claim 1 and it was submitted that claim 1 defines allowable subject matter. Therefore, the use of a camera with a rotatable joint on a telephone handset as described by Umezawa et al. (U.S. Patent No. 5,491,507), hereinafter Umezawa, in combination with Register does not teach or suggest the invention of claims 5-6 which are dependent, either directly or indirectly, on claim 1. Since claims 5-6 are dependent, either directly or indirectly, from claim 1, it is respectfully submitted that claims 5-6 define allowable subject matter as well. Applicants respectfully request that the rejection of claims 3-4 under 35 U.S.C. 103(a) be removed.

In the current Office action, claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register, as applied to claim 1 above, in view of Wilska et al., U.S. Patent No. 6,427,078.

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

As described previously, Register does not teach or suggest the invention of independent claim 1 and it was submitted that claim 1 defines allowable subject matter. Therefore, a handheld unit communicating with a remote location using wireless cellular communication as described by Wilska et al. (U.S. Patent No. 6,427,078), hereinafter Wilska, in combination with Register does not teach or suggest the invention of claims 7-9 which are dependent, either directly or indirectly, on claim 1. Since claims 7-9 are dependent, either directly or indirectly,

from claim 1, it is respectfully submitted that claims 7-9 define allowable subject matter as well. Applicants respectfully request that the rejection of claims 7-9 under 35 U.S.C. 103(a) be removed. Similarly, since claim 10 is dependent indirectly from claim 1, it is respectfully submitted that claim 10 defines allowable subject matter as well.

In the current Office action, claims 11-13 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register, in view of Jones Jr., U.S. Patent No. 5,974,334

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

Independent claim 11 recites a communication device comprising:

a handheld unit having a wireless communication circuit for communicating with remote locations;

a handset having voice input and voice output;

a mechanism for docking said handset with said handheld unit forming a docked unit, said docked unit dimensioned to be held in one hand while being used for voice input and voice output; and

at least one connection for carrying voice-representative signals between said handheld unit and said handset, both when said handset is docked with said handheld unit and when said handset is separate from said handheld unit.

Independent claim 23 recites a handset adapted to be removably attached to a handheld host computer of the type having connection for peripherals, the handset comprising:

a microphone for voice input and a speaker for voice output;

a mechanism for docking said handset with said handheld computer forming a docked unit, said docked unit dimensioned to be held in one hand while being used for voice input and voice output; and

at least one wireless connection for carrying voice-representative signals between said handset and said handheld computer, both when said handset is docked with said handheld computer and when said handset is separate from said handheld computer.

Just as Register does not teach or suggest the invention of independent claim 1, as described previously, Register does not teach or suggest the invention of independent claims 11 and 23. In particular, Register does not teach or suggest carrying voice-representative signals between a handheld unit and a handset or a handheld computer and a handset, as described previously. Also, as admitted by the Examiner, Register does not teach communications regardless of whether the handset and the handheld unit are docked. Also, the combination of Register and Jones Jr. (U.S. Patent No. 5,974,334), hereinafter Jones, does not teach or suggest the inventions of claims 11 and 23. In particular, Applicants respectfully disagree with the Examiner's assertion that Jones teaches data signals communicated from a handset to a handheld unit. Jones is concerned with a PDA base and a handset, not a handheld unit and a handset. The PDA base of Jones is not a handheld unit and the docked combination of the PDA base and the handset of Jones is not intended to be held in one hand during use as is the docked handheld unit and handset of the claimed inventions of claims 11 and 23. Therefore, it is respectfully submitted that neither Register, Jones, nor the combination thereof teach or suggest the claimed inventions of claims 11 and 23, and that independent claim 11 and 23 define allowable subject matter. Also, since claims 12-13 and 24 are dependent, either directly or indirectly, from claims 11 or 23, it is respectfully submitted that claims 12-13 and 24 define allowable subject matter as well. Applicants respectfully request that the rejection of claims 11-13 and 23-24 under 35 U.S.C. 103(a) be removed.

In the current Office action, claims 14-15 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register in view of Jones, as applied to claim 11 above, in further view of Lai.

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

As described previously, neither Register, Jones, nor the combination thereof teaches or suggests the inventions of independent claims 11 and 23, and it was submitted that claims 11 and 23 define allowable subject matter. Therefore, the use of an ear hook for phones as described by

Lai in combination with Register and Jones does not teach or suggest the invention of claims 14-15 and 25-26 which are dependent, either directly or indirectly, on claims 11 or 23. Since claims 14-15 and 25-26 are dependent, either directly or indirectly, from claims 11 or 23, it is respectfully submitted that claims 14-15 and 25-26 define allowable subject matter as well. Applicants respectfully request that the rejection of claims 14-15 and 25-26 under 35 U.S.C. 103(a) be removed.

In the current Office action, claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register in view of Wilska.

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

Independent claim 16 recites a handheld computing and communication device, including:

a handheld unit including a processor and a display communicating with said processor;

a card-shaped peripheral that communicates with remote locations, said handheld unit having a slot for accepting said card-shaped peripheral;

a handset including means for voice input and means for voice output;

a mechanism for docking said handset with said handheld unit forming a docked unit, said docked unit dimensioned to be held in one hand while being used for voice input and voice output;

at least one connection for carrying voice-representative signals between said handheld unit and said handset, and said card-shaped peripheral carrying at least one of said connection for carrying voice-representative signals and said mechanism for docking said handset to said handheld unit.

Just as Register does not teach or suggest the invention of independent claim 1, as described previously, Register does not teach or suggest the invention of independent claim 16. In particular, Register does not teach or suggest carrying voice-representative signals between a handheld unit and a handset, as described previously. Also, as admitted by the Examiner,

Register does not teach a card shaped peripheral to be used in a slot formed in the handheld unit. It is respectfully submitted that independent claim 16 defines allowable subject matter. Therefore, an image scanner by way of a camera that is electronically programmed onto a card as described by Wilska, and a handheld unit communicating with a remote location using wireless cellular communication as described by Wilska, in combination with Register does not teach or suggest the inventions of claims 17-21 which are dependent, either directly or indirectly, on claim 16. Since claims 17-21 are dependent, either directly or indirectly, from claim 16, it is respectfully submitted that claims 17-21 define allowable subject matter as well. Applicants respectfully request that the rejection of claims 16-21 under 35 U.S.C. 103(a) be removed.

In the current Office action, claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Register in view of Wilska, as applied to claim 21 above, in further view of Umezawa.

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

Since claim 22 is dependent from claim 21 which has previously been submitted to be allowable, it is respectfully submitted that claim 22 defines allowable subject matter as well. Applicants respectfully request that the rejection of claim 22 under 35 U.S.C. 103(a) be removed.

Accordingly, the applicant respectfully requests reconsideration of the rejections based on the arguments made above. After such reconsideration, it is urged that allowance of all claims will be in order.

Respectfully submitted,

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